# CORK IN. THE SOUTH

The Romance and Renaissance of Cork in the Southern States

By Giles B. Cooke, Ph.D. and Sanford S. Jenkins, Ph.D.

Research Department

Crown Cork & Seal Company

Reprinted from THE CROWN for April, 1942 and May, 1942

### Cork in The South

#### The Romance and Renaissance of Cork in the Southern States

#### Part I

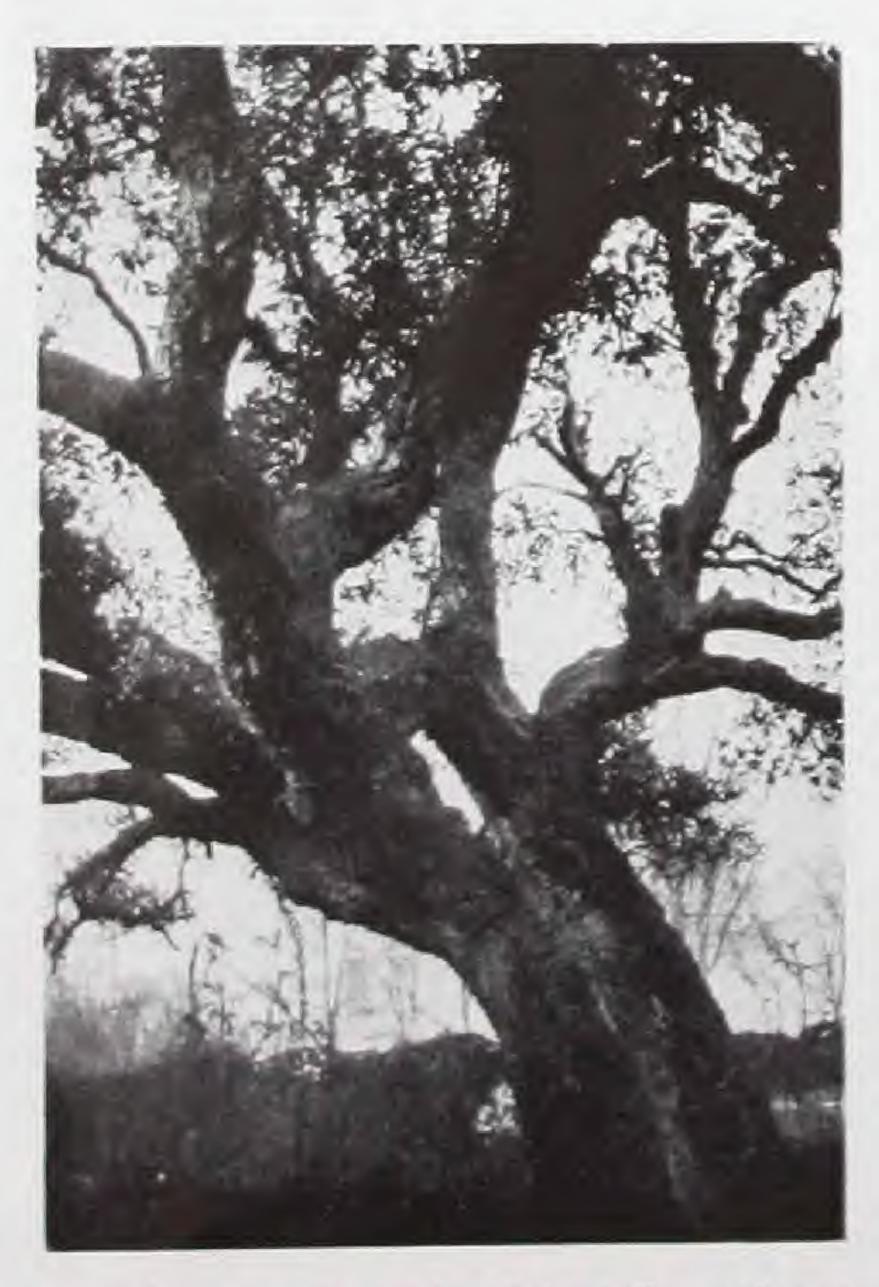
The planting of cork trees in California has proceeded so successfully and has been received with such general enthusiasm, Mr. Charles E. McManus, President of The Crown Cork and Seal Company, decided in 1941 to attempt the extension of this important project into other states. A few scattered cork trees were known to be growing in the South and records of several experimental cork plantings were found. Because of the existing cork oaks, favorable soil conditions and mild climate the southern states appeared to have possible cork producing areas.

ACCORDINGLY, a survey of the southern states was made and large, thriving old cork trees were found in Virginia, North Carolina, South Carolina, Georgia and Alabama. Also, data on experimental plantings in Florida and Texas indicate that the cork oak might be grown in sections of these states. This survey together with other collected data strengthened the opinion that cork could be grown on a commercial scale in parts of the South and plans for extending the cork growing project were formulated.

ARRANGEMENTS have been made with extension agents and forestry specialists in



Cork Oak at Ocean View, Va. The trunk of this tree is divided near the ground into two large sections, and often referred to as two trees.



View from another side of Cork Tree, Ocean View, Va.



Cork tree in churchyard at Calvary Episcopal Church, Tarboro, N. C.



Close-up of Cork Oak at Tarboro, N. C., with Rev. M. George Henry, Rector of Calvary P. E. Church.



Branch of Cork Oak tree, Tarboro, N. C.



A large Cork Oak at Winnsboro, S. C. This tree bore a bumper crop of acorns in 1941.

acorns. Their history is full of romance

witness an intense effort toward finding the southern areas where the cork oak thrives best.

THE large old cork trees found in the South were planted many years ago. Though widely separated they appear to have been planted about the same time. The Patent Office (the U. S. Department of Agriculture was not established until 1862) obtained a shipment of cork acorns from Spain about 1858 and distributed part of them throughout the South. Some of these old trees have been traced to these

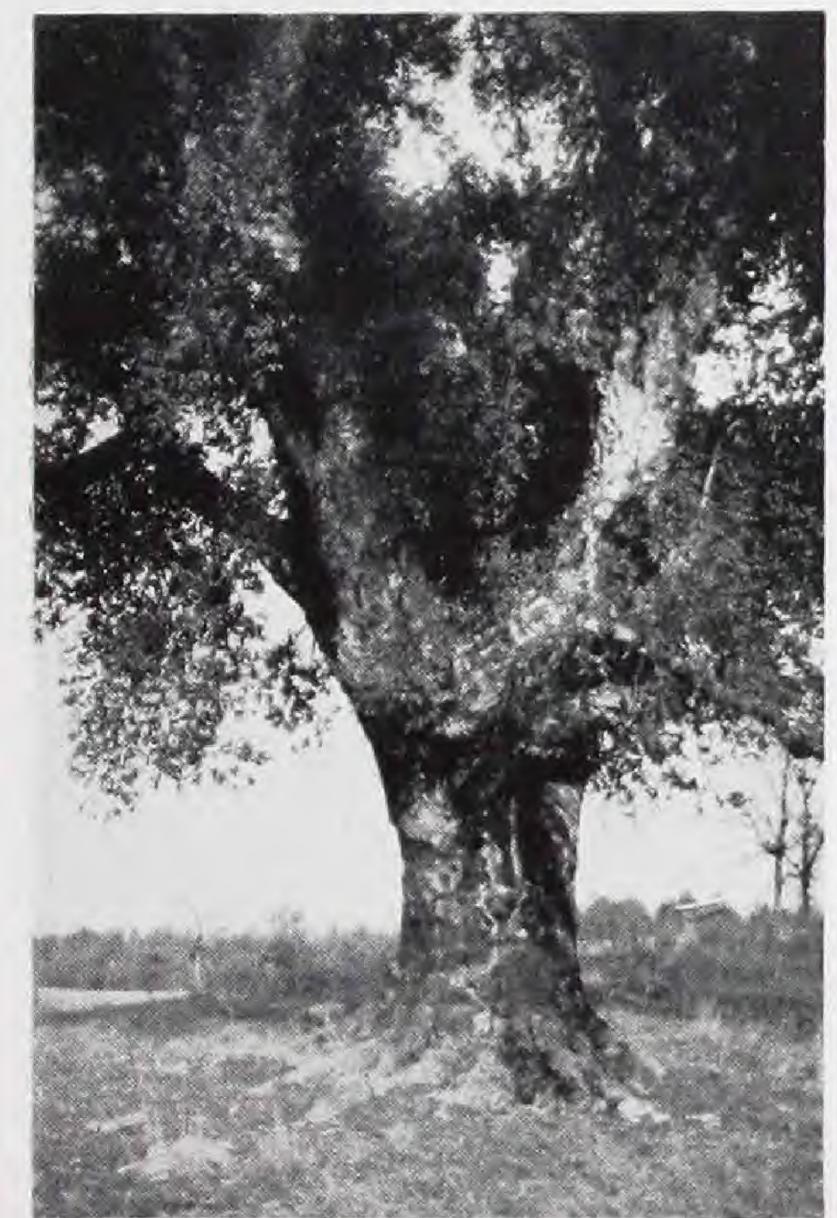
and human interest.

IN the suburbs of Norfolk, Virginia, stands a large, twin-trunk cork tree which apparently is more than eighty years old. The tree is now enclosed by a fence and a placard on the entrance gate states it is the only cork tree in Virginia. About this grand old tree, Mrs. Richard Wallace, President of the Ocean View Garden Club, has written:

"The Trees on Maple Avenue, Ocean View are two of the most interesting trees in Norfolk. These trees are on the land belonging to the estate of the late Peter Smith, which formerly belonged to the late William E. Taylor. Almost a century ago one of the superintendents on the latter's farm planted two acorns from a cork



Acorns from Cork Oak, Winnsboro, S. C. Some of the acorns from this tree in 1941 were very large.



Souvenir hunters have removed much bark from this Winnsboro Cork tree.

Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Arkansas, Mississippi, Louisiana and Texas for initial plantings of cork seedlings this spring. The number of trees set out in each state this year will be limited but much can be learned from this first planting. Next year, and the succeeding years, a larger number of cork seedlings will be available for each state.

THE local interest exhibited in this enterprise is very encouraging. Cooperating foresters and extension directors have promised willingly their best silvicultural skill. Other residents are keenly interested and hopeful of seeing permanent areas of cork oaks established. The next few years will



Cork Oak on the Coleman estate, Shelton, S. C. Standing near the tree are Mrs. H. G. Wright, great-granddaughter, and her mother, (right) granddaughter of Henry J. Coleman who planted this tree.



This Cork Oak stands on the State Hospital grounds at Columbia, S. C.



Mr. B. A. Gardner, Florist at S. C. State Hospital. The pots and cans contain cork seedlings, from acorns of tree at lower right on page 3.

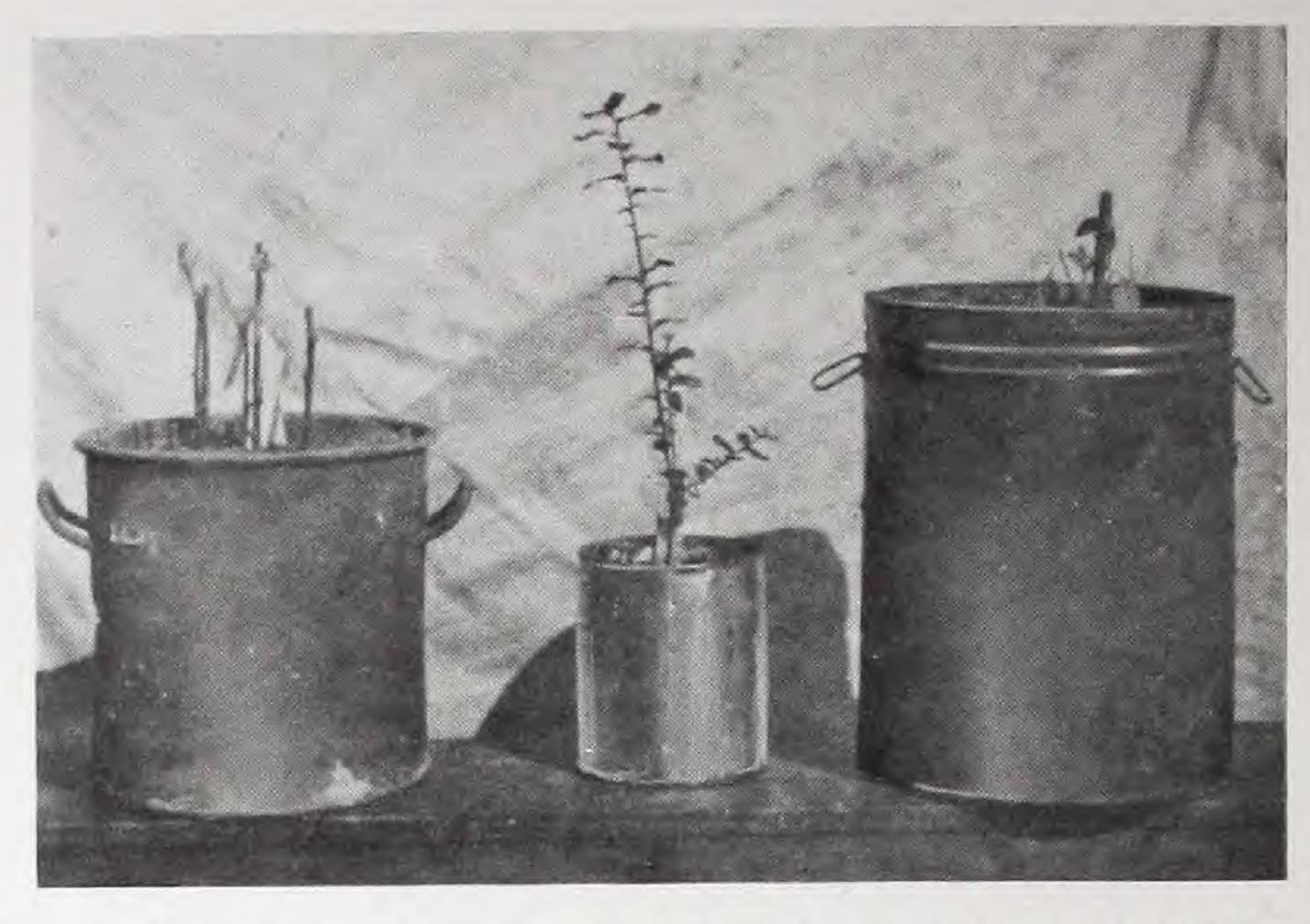
tree, little knowing that they would grow up to a very large size, and become one of the most talked-of landmarks in this vicinity.

During the Jamestown Exposition held here in 1907, a tale was circulated of a treasure hidden by Spanish sailors and marked by these trees. The story goes that many a youthful visitor to the exposition lingered on and could be seen digging under and near the trees, hoping to unearth a chest of gold. Be that as it may, the treasure made romantic story and the digging was no doubt very beneficial to the growth of the trees."

NORTH CAROLINA has one large cork oak at Tarboro. It stands in the church-yard of Calvary Episcopal Church and the rector, the Rev. M. George Henry, has supplied the history of this old cork tree.

Beginning in 1842 and continuing for more than fifty years, the Rev. Mr. Joseph B. Chesire served as rector of Calvary Church. In addition to being a beloved minister, Mr. Chesire was an ardent student of arboriculture. He planted many unusual trees in the churchyard, having a tree from every continent of the world. About 1850 Mr. Chesire planted a cork acorn in the churchyard which has grown to a large, thriving tree. Today, this cork oak stands approximately fifty feet in height and measures about eight feet in circumference. It bears acorns occasionally.

IN South Carolina cork oak culture is rich in history and full of recent scientific accomplishment. At Shelton, on the Coleman estate, a large cork tree is growing. Information about this cork oak was supplied by Mrs. H. G. Wright of Shelton,



Young Cork trees. The can on the left contains cuttings prepared by B. A. Gardner, that have developed roots and begun to grow.



A 10-year-old Cork Oak at Fruitland Nurseries, Augusta, Georgia. Height 20 ft., Dia. 10 inches. Mr. James G. Bailie, one of owners, is standing near the tree.



This tall Cork sapling was planted by Dr. Stewart J. Lloyd, Dean of School of Chemistry, University of Alabama, Tuscaloosa, about seven years ago.

a greatgranddaughter of Henry Jonathan Coleman, who planted the tree at his home before the Civil War. Mrs. Wright states her grandfather said that the tree was secured for his father by a Congressman in Washington. This tree does not bear acorns except very small ones that do not mature.

Not so far away from Shelton, near Winnsboro, Fairfield County, is a large cork oak which is evidently more than eighty years old. According to Mrs. Wright this tree stands on the old home place of the McCulloughs which is now the DePass farm. It measures about fifty feet in height and more than nine feet in circumference. In 1941 this cork oak bore a bumper crop of acorns.

CONCERNING this cork tree and others.

Dr. D. J. Weddell, Dean, School of Forestry, The University of Georgia, has supplied the following interesting information taken from an old report of the Department of Agriculture. Page 153 of the Report on Forestry by F. B. Hough, reads as follows:

"In 1858, and, it is believed, at an earlier period, quantities of acorns from the cork oak were procured from the south of Spain, and distributed from the Patent Office to those sections of the country where it was thought they would thrive. A report made at the close of 1875, from Winnsborough, S. C., shows that all the acorns planted in 1859 came up and made healthy plants. Three of these are now about twenty-four feet high, and over 27 inches in circumference. Two trees, at

least, are flourishing at Orangeburg, S. C., and there are probably elsewhere in the South examples of successful planting of this tree. The cork oak requires a warm climate; but the Southern States and California appear perfectly well adapted to its wants."

ANOTHER South Carolina cork oak is growing on the State Hospital Grounds at Columbia. This tree according to Mr. B. A. Gardner, Florist for the State Hospital, measures seven feet and nine inches in circumference and is fifty-one feet tall. It is in good condition but bears acorns very sparingly. This past year it produced twenty-three acorns from which Mr. Gardner has obtained seventeen cork seedlings. The following bit of history about this tree which appeared in The State, a Columbia newspaper, July 2, 1935 was written by Mrs. Margaret Babcock Meriweather, a daughter of Dr. J. W. Babcock who was head of the South Carolina State Hospital for approximately forty years:

"There is, and in my memory has been, only one cork oak in the State Hospital yard. It was not planted by my father, the late Dr. J. W. Babcock, and must have been an old tree when he went there in 1891. In an article I wrote for the series of 'Famous Columbia Trees,' which appeared in The State in 1932, the planting of the cork oak is traced to Dr. Edward Barton of New Orleans, who married Miss Agnes Wallace of Columbia in 1848. Mrs. Barton's father owned the land now included in the State Hospital grounds and built homes there for several of his children. Three cork oaks were planted by Mrs. Barton, whose husband had brought the acorns from Mexico City according to Wallace family tradition."

MR. GARDNER has conducted some interesting experiments on growing cork trees and one of these is a very valuable contribution to the science of cork propagation. Taking cuttings and putting them in pots of rich sandy loam, Mr. Gardner has succeeded in getting twenty-five per cent of them to develop roots and grow. This means we shall not have to depend entirely upon acorns in growing domestic cork trees. Mr. Gardner is the first person to report "takes" with stem cuttings in cork culture.

GEORGIA has several old cork trees and also a nursery where cork seedlings are pro-

duced from acorns. The cork oak makes an attractive shade and ornamental tree. Fruitland Nurseries, Augusta, Georgia have grown cork trees for this purpose for quite some years. A number of young cork oaks are growing on the nursery grounds. About one of these beautiful young cork trees, Mr. Lester C. Helm of Fruitland Nurseries, has written:

"A bed of acorns was planted at this spot several years ago. All plants were sold or moved but this one. Realizing the beauty and rareness of this tree, it has been allowed to grow unmolested to this day. Due to its ideal location—that of being near and in a bed of plants which are watered at intervals during the summer—the tree has made rapid strides of development. Diameter at present is about ten inches—height twenty feet."

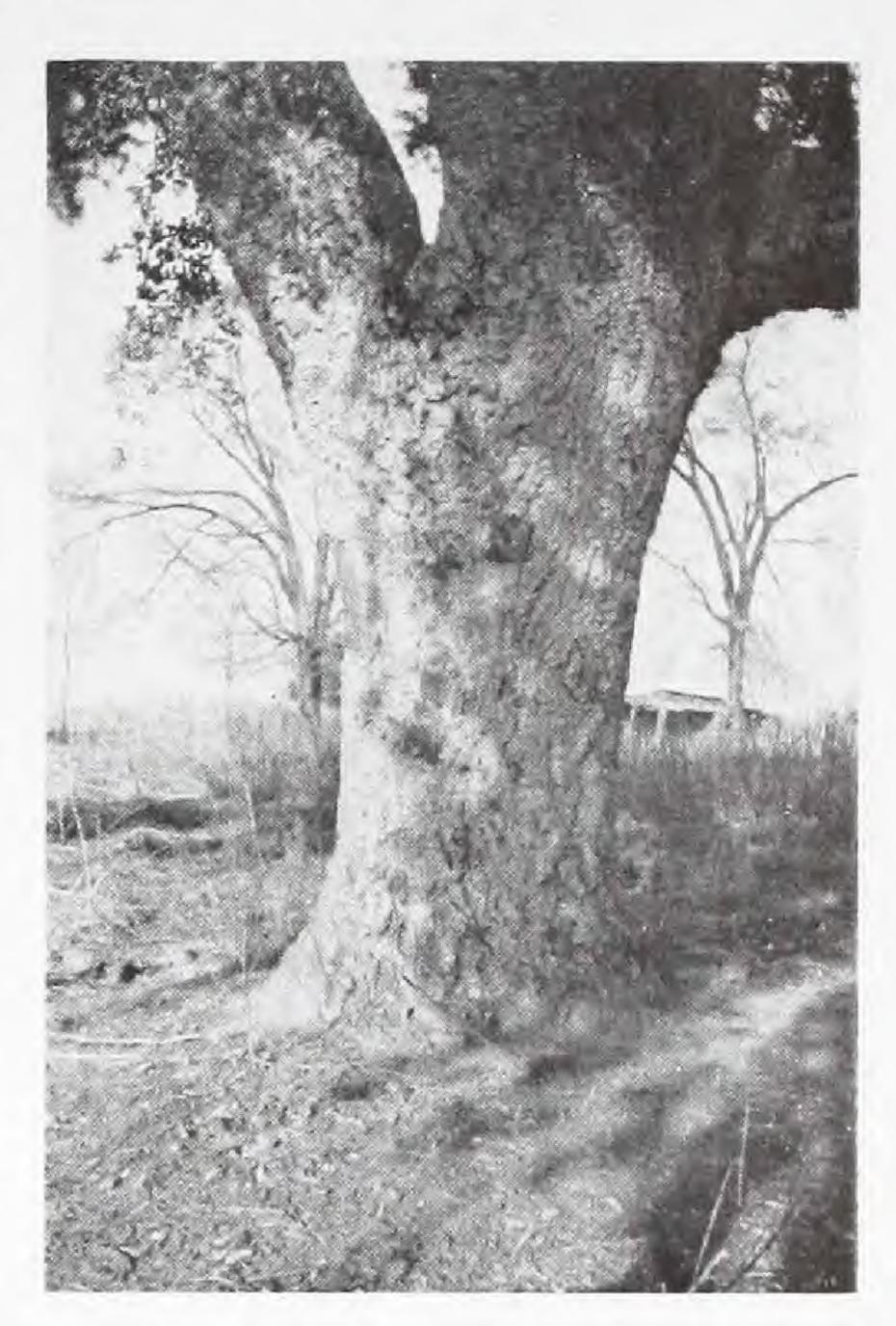


A large Cork Oak on the Seaton Hill place near Greensboro, Alabama.

IN Alabama two cork oak trees have been located. About seven years ago Dr. Stewart J. Lloyd, Dean of the School of Chemistry, University of Alabama, planted a cork tree near the Chemistry Building. The tree was obtained from the Fruitland Nurseries, Augusta, Georgia. It is in a healthy condition but has grown rather slowly.

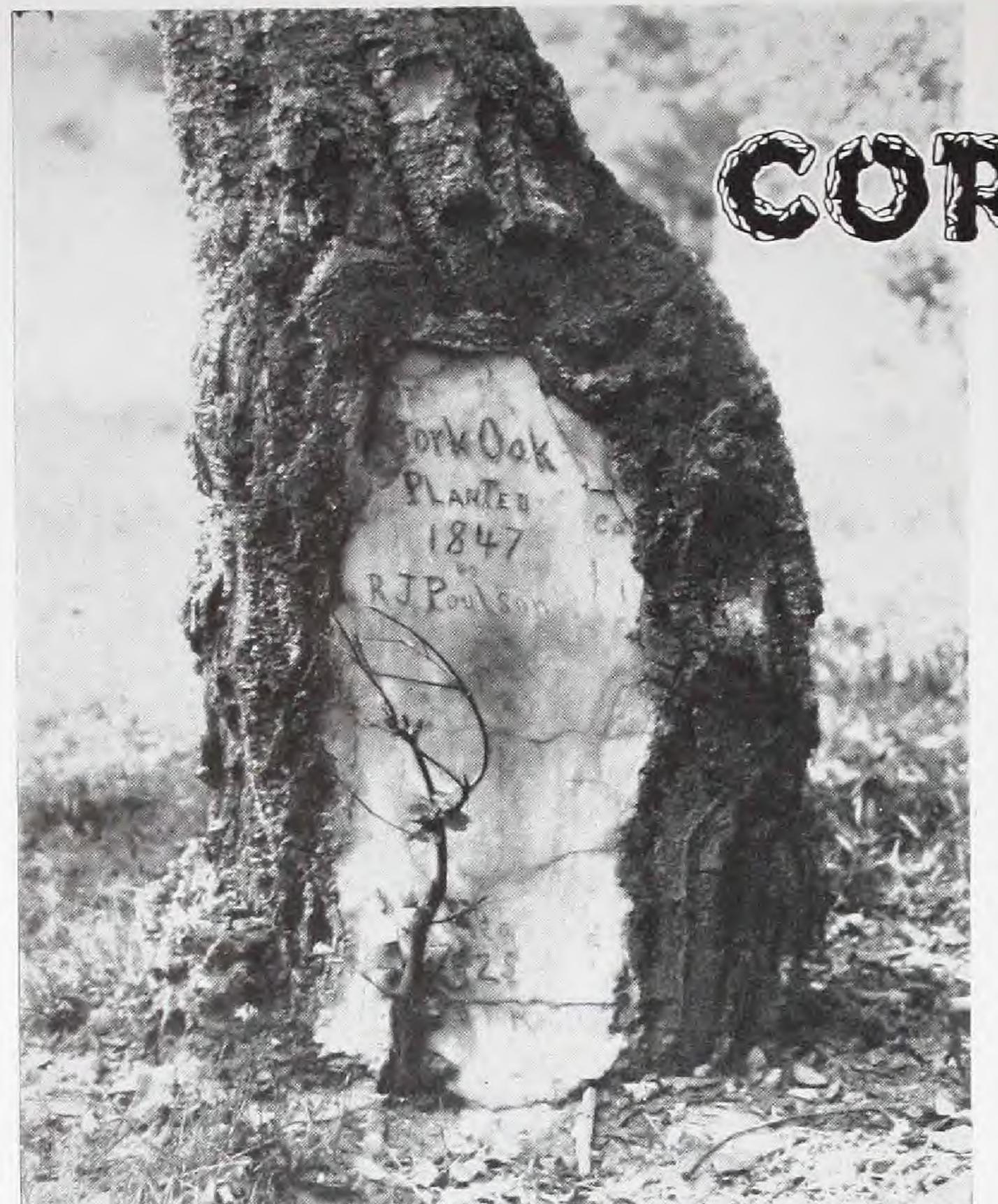
AT Greensboro, Hale County, Alabama, a large, old cork oak, in excellent condition,

is growing on the Seaton Hill place now owned by Mr. Madison Jones. This tree measures about nine feet in circumference and is approximately fifty feet high. Mr. DeVane K. Jones, Attorney-at-Law, Tuscaloosa, has supplied the history of this magnificent tree. An article in the Alabama Forest News, August 1930, written by Mr. Henry A. Jones, father of DeVane K. Jones, reads as follows:



Note the large, well formed trunk of this old Cork tree at Greensboro.

"My father, Dr. William A. Jones, was a son of Dr. William Jones of Greensboro, and with his father's consent, my father built his home on the 160 acre tract of land, known as Seaton Hill -. I was born at Seaton Hill on January 9, 1860 and this tree together with a Horse Chestnut which lived and seemed to flourish for a while, are among my earliest recollections. When I first remember any such objects, being at the time, as I now judge, some three or four years of age, this tree was two to three inches in diameter and four to five feet high. — I was always told by my mother that she planted the acorn from which it grew and that the acorn was sent to her from the United States Patent Office at the request of Colonel Sydenham Moore who then represented that district of Alabama in Congress . . . '



Close-up of an old Cork tree in Accomac County, Virginia. Tree surgery has helped preserve the trunk of this 95-year-old Cork Oak.

Photo—Courtesy Virginia State Chamber of Commerce.

## CORK in the SOUTH

The Romance and Renaissance of Cork in the Southern States

#### PART II

WHEN the cork oak growing near Norfolk, Virginia was photographed in January of this year, a placard on the gate to the enclosed area stated that this tree was the only cork oak growing in Virginia. Through the aid of Prof. A. B. Massey of Virginia Polytechnic Institute, another very old cork tree has been located in Accomac County, Virginia. The following quotation concerning this tree, taken from "Notable Trees of Virginia," supplied by the Virginia State Chamber of Commerce and Mr. Henry Hopp of the Soil Conservation Service, U. S. Department of Agriculture, Washington, D. C., reads as follows:

"In 1847 several trees of Quercus Suber, or Spanish oak, were smuggled out of Spain, allegedly by one Musco Essex. Two of these trees were planted at Cokesbury, the estate of R. J. Poulson in Accomac County. One of these died as did another set out in North Carolina. The tree stands a few yards from the beautiful winding Onancock River, at the mouth of which the Battle of the Barges was fought in 1782, and only a little way from the place where Ekeeks, King of the Onancocks, held his councils three hundred years ago."

South of Onancock, in Northampton County, another cork oak is growing in Virginia. Mr. Hopp has written the following



A large Cork Oak on the Pearson estate near Strother, S. C., in the Blair neighborhood. Mrs. W. B. Pearson is standing near the tree.



Tall Cork Oak on the lawn of Edwin G. Seibels' estate, Columbia, S. C. This tree is 57 feet tall. Photo—Courtesy Soil Conservation Service, U.S.D.A.



A prolific Cork tree on the McKie property near North Augusta. This tree produces very large acorns regularly.



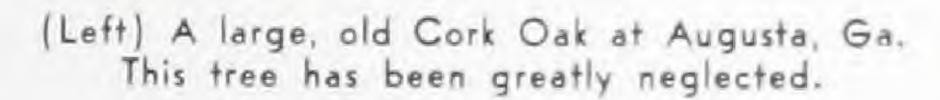
Third and fourth Cork trees of the group of four, on the George McKie estate, North Augusta, S. C.



Another Cork Oak on the McKie farm, North Augusta, S. C., the largest of a group of four.



This is the oldest Cork tree in or near Augusta, Ga., planted by Mr. P. J. Berckmans.





Large Cork Oak at Georgetown, Ga. The circumference measures 9-2/3 feet. Photo-Courtesy Bureau of Plant Industry, U. S. D. A.



This 8-year-old Cork Oak at Fruitland Nurseries, Augusta, Ga., measures 6 inches in diameter and 15 feet in height.

about this thriving cork tree:

This cork oak tree is owned by Mrs. W. J. Richardson, Capeville, Virginia. Although the tree stands in an eroded draw on a very sandy soil, it is very vigorous. It is said by the owner to have come from Ocean View, Norfolk County, Virginia. We have the following data on this tree:

"Age—35 years; Height—30 to 35 feet; Diameter—1 ft. high, 20-22 inches."

THE living old cork oaks of the South appear to be concentrated in the states of South Carolina and Georgia. A large cork tree is growing on the Pearson estate near Strother, South Carolina, in the Blair neighborhood. Mrs. H. G. Wright of Shelton, South Carolina, has supplied the following information about this old tree:

'In the Blair neighborhood there is another cork oak in beautiful condition, very flourishing and tall, growing in shape like the one near Winnsboro. This is at the home of Mrs. W. B. Pearson. This is a beautiful old home built in 1820 by the great-grandfather of Mrs. Pearson's husband, who died recently. He was a great botanist and naturalist and imported several cork seedlings from Mexico. Two of them have died long since, but one of them is still living and in excellent condition. The Pearson cork oak was planted by George Butler Pearson, who was a contemporary of Henry Jonathan Coleman, before the Civil War."

The tree is about 40 feet high and 7 feet in circumference. It does not bear acorns.

THE tallest cork oak that has been found in the eastern part of the United States is growing on the lawn of the Seibels' estate in Columbia, South Carolina. According to Mr. L. C. Helm, of Augusta, Georgia, this is the largest cork tree he has ever seen. The tree is 57 feet tall and has spreading branches. It has been well cared for and is in healthy condition.

IN the southeastern part of South Carolina near the Georgia boundary are a number of old cork trees as well as others from more recent plantings. Mr. L. C. Helm of Fruitland Nurseries, Augusta, Georgia, has written the following about the old trees in this area:

"These trees, located on the old Martin Town Road near Augusta, were planted by a Mr. Hammond many years ago. The present owners, McKie, say the trees are 100 years old, but I doubt seriously if they are over 40 years of age. There are four trees now standing, of the original five or six. Someone bought this fifth tree, and after sawing it off close to the ground, transferred the tree bodily to some unknown destination. It is reported that the tree was purchased for about \$100.00. The diameter of the trees range from 15 to 24 inches. The height of all seem to be the same—approximately 30 to 35 feet. These trees, however, do bear fruit or

acorns, and heretofore have been the source of most of our cork oak stock."

ACCORDING to Mr. Helm one of these trees is very prolific and bears acorns very frequently. He states that last year 40 pounds were gathered from one of the trees and that 16 nuts weighed one pound. At one time the tree produced over half a barrel of acorns in one season.

THROUGH Mr. Helm the following information about the large cork oaks in and near Augusta, Georgia, has been obtained. The oldest cork tree in this vicinity is located in Augusta, Georgia. It was planted about 60 years ago by Mr. P. J. Berckmans, who at that time owned and operated the Fruitland Nurseries. This tree today has a trunk diameter of 3 feet, height of 35 feet and a spread of 40 feet. It has not borne any acorns in recent years.

ANOTHER large cork oak at Augusta, which is approximately 50 years old, has been greatly neglected. The tree is surrounded by weeds, briars and wire which are doing their utmost to destroy it. No doubt a little effort in the way of cultivating, fertilizing, and watering would prolong the life of this tree for many years to come. At the present time its diameter is about 2 feet and its height about 35 feet. This tree also does not produce acorns.

DEAN D. J. Weddell of the School of Forestry, The University of Georgia has supplied data about a large thriving cork oak which is growing near Georgetown, Quitman County, Georgia. Mr. Bullock, County Agent of Quitman County, has written to Dean Weddell as follows:

"THE land on which the cork tree grows in Quitman County is now owned by Dr. Loren Gary of Georgetown, Georgia. The land at the time of the history of the cork tree was owned by the line of Rices. Mrs. Sam Rice, formerly Miss Emma Holliday, is said to have planted this tree bringing it from Stewart County about 60 or 70 years ago. I am told that there is another tree where this one came from seven miles east of County Line in Stewart County at the Holliday Tan Yard."

EFFORTS are being made to locate the cork tree in Stewart County referred to above, but at the present time no definite information concerning this tree has been obtained.

IN addition to the old cork trees in Georgia, there are many cork trees of recent planting in and near the Augusta area. The Fruitland Nurseries, Augusta, Georgia,



View of trunk of Cork Oak at Georgetown, Georgia, Dean D. J. Weddell, School of Forestry, University of Georgia, is examining the Cork bark.

Photo-Courtesy Bureau of Plant Industry, U. S. D. A.

have been growing and experimenting with cork trees for over 50 years. Some of the trees grown in their arboretum have shown unusual vigor and have reached considerable size in a relatively short period of time. One tree at the age of 10 years has attained a diameter of 10 inches and a height of 20 feet. Another tree age 8 years is 15 feet tall and about 19 inches in circumference.

ABOUT 28 years ago an experimental planting of cork trees was made in north-western Florida. Unfavorable soil conditions, coupled with damage from severe hurricanes have caused most of these trees to die. Mr. I. F. Eldredge, Regional Survey Director, U. S. Forest Service, New Orleans, Louisiana, has given us the following account of this Florida planting:

"I obtained the acorns in 1913 or '14 from Portugal—several hundred pounds. They came in bad shape, and many of them failed to sprout when planted in the field. The largest plantation was made at the East Bay Ranger Station in an old field. About an acre of trees, spaced 6 x 6, was obtained and by the summer of 1916 they were about 8 feet high. A hurricane in the fall of 1916 drenched them with salt water from the nearby bay and so twisted and wrenched the trees that the plantation suffered a heavy mortality. By the spring of 1919, only a few dozen trees survived, the tallest of which were 15 to 18 feet. I have not seen the plantation since 1919, but understand that few, if any, of the trees remain."

SEVERAL plantings of cork trees have been made in Texas. Mr. C. F. Evans, U.

S. Forest Service, Atlanta, Georgia, has given us information regarding one of these plantings. The following paragraph was taken from a letter sent to Mr. Evans and written by Dr. D. A. Anderson, Chief, Division of Silvicultural Research, Texas A. & M. College:

"About 30 years ago the Experiment Station of A. & M. College initiated a small planting of cork oak on the campus. Six trees were planted of which three lived for around fifteen years. No trees are alive at present and there is little information available at this time as to whether the trees died naturally or were cut down for the construction of buildings. It is acknowledged, however, that the soil in this immediate region is probably not suitable for the growth of cork oak as compared with other areas to be found in the state with better soil types."

DR. S. H. Yarnell, Chief, Division of Horticulture, Texas A. & M. College has supplemented the above information and states that one of these trees measured 16 feet in height and 8½ inches in diameter after a growth of 12 years. According to Dr. Yarnell the tree died because of unfavorable conditions and a borer attack.

NO cork trees have been located in Arkansas, Mississippi or Louisiana. However, these states contain areas where the soil and climate are similar to the regions where old, thriving cork trees have been found. Therefore, it is entirely possible, and highly probable, that success in establishing the cork tree in parts of these states may be attained. The next few years will definitely verify or disprove this premise.

VERY probably there are some other cork oaks growing in the southern states. However, the number located is sufficient to prove definitely that cork can be produced in this section of the United States. Experimental plantings of cork trees have been started this spring. The young cork seedlings are now growing in those states where danger of frost is past and will be transplanted in the remaining states shortly. The planting of these trees is being carried out under the supervision of the cooperating foresters, who will care for the trees and keep records of growth and progress.

MR. McManus is already making plans for next year and hopes to have many more young cork trees available for each state. Through the cooperation of the agricultural directors and foresters many cork acorns will be sprouted at various state experimental farms during the coming fall and winter. In the warmer sections a limited number of acorns will be planted in the open. Special efforts will be directed toward propagation by means of cuttings.